(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 7 December 2000 (07.12.2000)

PCT

English

(10) International Publication Number WO 00/74040 A1

(51) International Patent Classification⁷: G11B 5/147

(21) International Application Number: PCT/US00/14449

(22) International Filing Date: 25 May 2000 (25.05.2000)

SO TO THE ALL Y

(25) Filing Language:

(26) Publication Language: English

(30) Priority Data: 60/136,603 27 May 1999 (27.05.1999) US 09/560,842 28 April 2000 (28.04.2000) US

- (71) Applicant: UTM SYSTEMS CORP. [US/US]; Suite 1110, 10900 Northeast Eighth Street, Bellevue, WA 98004-4454 (US).
- (72) Inventors: OPLE, Angelina; 8206 Caminito Lacayo, La Jolla, CA 92037 (US). LEE, Robert; 717-140th Avenue Southeast, Bellevue, WA 98005 (US). HALEY, Jeffrey, T.; 4730-91st Avenue Southeast, Mercer Island, WA 98040-4440 (US).

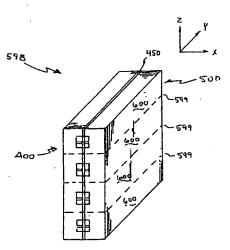
- (74) Agents: VILLANI, Christopher, B. et al.; Graybeal Jackson Haley LLP, Suite 350, 155-108th Avenue Northeast, Bellevue, WA (US).
- (81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THIN MAGNETIC MEDIUM READ HEAD



(57) Abstract: A thin film magnetic medium read head (600) is disclosed wherein the gap plane of the head is parallel to a plane generally defined by either the cores or the coils within the head structure. The read heat comprises left and right core pieces (100, 200) of magnetic material, each core piece having a magnetic coil wound thereon and a flexible printed wiring board electrically connected to the coil, to form left and right core assemblies. The core assemblies are loaded edgewise into a plurality of slots (403a, 403b) formed in a pair of mirror image brackets, then a face of each bracket is machined so that the face is flush with an edge of the core assemblies. The two bracket (400) are then bonded to one another with a non-magnetic foil layer (450) between the bracket to establish a gap between opposing core assemblies. The brackets are then divided into separate heads along planes parallel to a plane parallel to the gap plane. A surface of each individual head parallel to the gap plane is then machined to expose a portion of the core assemblies and the gap.

VO 00/74040